

Assistant Commissioner for Patents  
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operating parameter value, a mutation rate and a set of probabilistic mutation criteria are stored in a second portion of code. The method further comprises, responsive to an occurrence of a predetermined event associated with the environment, using the mutation rate and the probabilistic mutation criteria to determine if the operating parameter value should mutate, and changing the operating parameter value in response to a determination that the operating parameter value should mutate.

In the Claims:

Please delete claims 20-22.

Please add new claims 23-57 as follows:

1 ~~23~~. A method for adapting a software product to an environment, the method comprising:

B2  
providing the software product with a first portion of code including instructions for performing a predetermined function, at least one aspect of performing the predetermined function being controllable by an operating parameter value;  
providing the software product with a second portion of code having stored therein the operating parameter value, a mutation rate and a set of probabilistic mutation criteria; and  
responsive to an occurrence of a predetermined event associated with the environment,

using the mutation rate and the probabilistic mutation criteria to determine if the  
operating parameter value should mutate, and  
changing the operating parameter value in response to a determination that the  
operating parameter value should mutate.--

<sup>2</sup>  
~~24~~. A method according to claim <sup>1</sup>~~23~~ further comprising:

providing the software product with a third portion of code that includes instructions  
for carrying out the step of using the mutation rate and the probabilistic  
mutation criteria to determine if the operating parameter value should mutate  
and the step of changing the operating parameter value.--

<sup>3</sup>  
~~25~~. A method according to claim <sup>1</sup>~~23~~ wherein the step of changing the operating  
parameter value includes substantially randomly selecting a new operating parameter  
from a predetermined range of values.--

<sup>4</sup>  
~~26~~. A method according to claim <sup>1</sup>~~23~~ wherein the predetermined event is selected from a  
group consisting of a user-to-user copying event, operation of the product, unlocking of a  
product feature and a change to a predetermined operating parameter of the product.--

<sup>5</sup>  
~~27~~. A method according to claim <sup>1</sup>~~23~~ wherein the second portion of code has stored  
therein a set of lineage-relevant information relating to a plurality of lineage-relevant  
events resulting in the product, and wherein the method further comprises:

responsive to the occurrence of a predetermined event, modifying the set of lineage-relevant information to include information relating to the occurrence of the predetermined event.--

<sup>6</sup>  
~~28~~. A method according to claim <sup>5</sup>~~27~~ further comprising:

transmitting the set of lineage-relevant information to a central database.--

<sup>7</sup>  
~~29~~. A method according to claim <sup>1</sup>~~28~~ further comprising:

changing the mutation rate to a predetermined replacement mutation rate.--

<sup>8</sup>  
~~30~~. A method according to claim <sup>7</sup>~~29~~ wherein the desirable replacement mutation rate is zero.--

<sup>9</sup>  
~~31~~. A method according to claim <sup>8</sup>~~30~~ further comprising:

changing the operating parameter value to a desirable fixed value.--

<sup>10</sup>  
~~32~~. A method according to claim <sup>6</sup>~~31~~ wherein the set of lineage-relevant information is stored in the second portion of code as a plurality of bits, at least one of the bits having been selected at random and its state changed in response to each of the plurality of lineage-relevant events resulting in the product.--

<sup>11</sup>  
~~33~~. A method for adapting a software product to an environment, the method comprising:

providing the software product with a first portion of code including instructions for performing a predetermined function, at least one aspect of performing the predetermined function being controllable by an operating parameter value; providing the software product with a second portion of code having stored therein the operating parameter value, a mutation rate, a set of probabilistic mutation criteria and a set of lineage-relevant information relating to a plurality of lineage-relevant events resulting in the product; providing the software product with a third portion of code that includes instructions for changing the operating parameter value in response to an occurrence of a predetermined event associated with the environment and a determination that the operating parameter value should mutate; and responsive to an occurrence of a predetermined event associated with the environment, using the mutation rate and the probabilistic mutation criteria to determine if the operating parameter value should mutate, and changing the operating parameter value in response to a determination that the operating parameter value should mutate.--

12  
34. A method according to claim 33 wherein the step of changing the operating parameter value includes substantially randomly selecting a new operating parameter from a predetermined range of values.--

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<sup>13</sup>  
~~35~~. A method according to claim <sup>11</sup>~~33~~ wherein the predetermined event is selected from a group consisting of a user-to-user copying event, operation of the product, unlocking of a product feature and a change to a predetermined operating parameter of the product.--

<sup>14</sup>  
~~36~~. A method according to claim <sup>11</sup>~~33~~ further comprising:  
responsive to the occurrence of a predetermined event, modifying the set of lineage-relevant information to include information relating to the occurrence of the predetermined event.--

<sup>15</sup>  
~~37~~. A method according to claim <sup>14</sup>~~36~~ further comprising:  
transmitting the set of lineage-relevant information to a central database.--

<sup>16</sup>  
~~38~~. A method according to claim <sup>15</sup>~~37~~ further comprising:  
transmitting a replacement mutation rate from the central database to the software product.--

<sup>17</sup>  
~~39~~. A method according to claim <sup>16</sup>~~38~~ wherein the replacement mutation rate is zero.--

<sup>18</sup>  
~~40~~. A method according to claim <sup>15</sup>~~37~~ further comprising:  
transmitting a replacement operating parameter value from the central database to the software product.--

<sup>19</sup>  
~~41~~. A method according to claim <sup>11</sup>~~33~~ wherein the set of lineage-relevant information is stored in the second portion of code as a plurality of bits, at least one of the bits having

been selected at random and its state changed in response to each of the plurality of lineage-relevant events resulting in the product.--

<sup>20</sup>  
--42. A method for adapting a software product to an environment, the method comprising:

providing the software product with a first portion of code including instructions for performing a predetermined function, at least one aspect of performing the predetermined function being controllable by an operating parameter value;

providing the software product with a second portion of code having stored therein the operating parameter value, a mutation rate, a set of probabilistic mutation criteria and a set of lineage-relevant information relating to a plurality of lineage-relevant events resulting in the product;

providing the software product with a third portion of code that includes instructions for changing the operating parameter value in response to an occurrence of a predetermined event associated with the environment and a determination that the operating parameter value should mutate; and

responsive to an occurrence of a predetermined event selected from a group consisting of a user-to-user copying event, operation of the product, unlocking of a product feature and a change to a predetermined operating parameter of the product,

using the mutation rate and the probabilistic mutation criteria to determine if the  
operating parameter value should mutate,  
changing the operating parameter value by substantially randomly selecting a  
new operating parameter from a predetermined range of values in  
response to a determination that the operating parameter value should  
mutate, and  
modifying the set of lineage-relevant information to include information relating  
to the occurrence of the predetermined event.--

21  
--43. A method according to claim 20 further comprising:

transmitting the set of lineage-relevant information to a central database.--

22  
--44. A method according to claim 21 further comprising:

transmitting a replacement mutation rate from the central database to the software  
product.--

23  
--45. A method according to claim 21 further comprising:

transmitting a replacement operating parameter value from the central database to  
the software product.--

24  
--46. A method according to claim 20 wherein the set of lineage-relevant information is  
stored in the second portion of code as a plurality of bits, at least one of the bits having

been selected at random and its state changed in response to each of the plurality of lineage-relevant events resulting in the product.--

<sup>25</sup>  
~~47~~. A method for adapting a software product to an environment, the method comprising:

providing a plurality of software products each having a first portion of code including instructions for performing a predetermined function, at least one aspect of performing the predetermined function being controllable by an operating parameter value, a second portion of code having stored therein the operating parameter value, a mutation rate, a set of probabilistic mutation criteria and a set of lineage-relevant information relating to a plurality of lineage-relevant events resulting in the product, and a third portion of code that includes instructions for changing the operating parameter value in response to an occurrence of a predetermined event associated with the environment and a determination that the operating parameter value should mutate;

receiving at a central database a transmission of the lineage-relevant information from at least a portion of the plurality of software products; and performing a statistical analysis of the lineage-relevant information from all of the at least a portion of the plurality of software products to ascertain a set of desirable characteristics for the software product.--



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<sup>24</sup>  
~~48~~. A method according to claim <sup>25</sup>~~47~~ further comprising:

determining from the statistical analysis a desirable replacement mutation rate; and  
transmitting the desirable replacement mutation rate to at least one of the plurality of  
software products.--

<sup>27</sup>  
~~49~~. A method according to claim <sup>25</sup>~~47~~ further comprising:

determining from the statistical analysis a desirable replacement operating parameter  
value; and  
transmitting the desirable replacement operating parameter value to at least one of  
the plurality of software products.--

<sup>28</sup>  
~~50~~. A computer program product for performing a predetermined function, the product  
comprising:

a computer readable medium;  
a first portion of code that is stored on the medium and that includes instructions for  
performing the predetermined function, at least one aspect of performing the  
predetermined function being controllable by an operating parameter value;  
a second portion of code that is stored on the medium and that includes the operating  
parameter value, a mutation rate and a set of probabilistic mutation criteria;  
and

a third portion of code that is stored on the medium and that includes instructions for modifying the operating parameter value in response to a combination of an occurrence of a predetermined event and a determination that the probabilistic mutation criteria have been met.--

<sup>29</sup>  
~~31~~. A computer program product according to claim <sup>26</sup>~~50~~ wherein the third portion of code includes means for monitoring changes to the environment and means for identifying the occurrence of a predetermined event.--


<sup>30</sup>  
~~32~~. A computer program product according to claim <sup>26</sup>~~50~~ wherein the predetermined event is selected from a group consisting of a user-to-user copying event, operation of the product, unlocking of a product feature and a change to a predetermined operating parameter of the product.--

<sup>31</sup>  
~~33~~. A computer program product according to claim <sup>26</sup>~~50~~ wherein the second portion of code includes a set of lineage-relevant information relating to at least one lineage-relevant event resulting in the product and wherein the second portion of code is configured for receiving additional information relating to at least one of a user-to-user copying event, operation of the product, unlocking of features of the product and a change to operating parameters of the product.--

<sup>32</sup>  
~~34~~. A computer program product according to claim <sup>31</sup>~~33~~ wherein the lineage-relevant information is stored in the second portion of code as a plurality of bits, at least one of the

bits having been selected at random and its state changed in response to each lineage-relevant event in the chain resulting in the product.--

<sup>33</sup>  
~~33~~. A computer program product for performing a predetermined function, the product comprising:

- 
- a computer readable medium;
  - a first portion of code that is stored on the medium and that includes instructions for performing the predetermined function, at least one aspect of performing the predetermined function being controllable by an operating parameter value;
  - a second portion of code that is stored on the medium and that includes the operating parameter value, a mutation rate, a set of probabilistic mutation criteria and a set of lineage-relevant information relating to at least one lineage-relevant event resulting in the product, the second portion of code being configured for receiving additional information relating to at least one of a user-to-user copying event, operation of the product, unlocking of features of the product and a change to operating parameters of the product;
  - a third portion of code that is stored on the medium and that includes means for identifying an occurrence of a predetermined event, means for determining that the probabilistic mutation criteria have been met and means for modifying the operating parameter value in response to a combination of an